(TRANSLATION OF DECISION OF REFUSAL)

Reference No. Dispatch No. 236556

Dispatch Date 4/14/2009

DECISION OF REFUSAL

Patent Application No.	2006-321987
Drafting Date	4/9/2009
Examiner of JPO	Yoko YAMAGUCHI 3484 2P00
Title of the Invention	PRINTING-FLUID CONTAINER
Applicant	HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.
Representative/Applicant	Masaki GOTOH (three others)

This patent application is refused for the reason 2 as stated in the notification of reason(s) for refusal dated 10/8/2008.

The argument and amendment have been examined, but no basis sufficient to overthrow the previously given reason(s) for refusal has been found.

Remark:

In the amendment of 1/8/2009, the applicant has amended claim 1 to include that "an alignment pocket is recessed into a center portion of a leading surface of the printing-fluid reservoir", "the printing-fluid interface is provided below the alignment pocket", "the vertical axis intersects the air-interface, the printing-fluid interface and the alignment pocket", "the electrical interface is provided", and "the horizontal axis intersects the electrical interface and the alignment pocket".

To the argument of 1/8/2009, the applicant has argued as follows. Since the air interface, the ink interface and the electrical interface are located around the alignment pocket, each interface

and the alignment pocket are proximally-positioned. So, the present invention can limit the effects of the tolerance of the alignment pocket, thereby each interface can be engaged with high accuracy. Thus, the present invention cannot be easily achieved by a person skilled in the art based on cited document 1 (2002-305212A).

This point has been considered below.

The invention described in cited document 1 does not have the alignment pocket that is provided in the center, but has the guiding features 58, 60, which are disposed on both sides of above and below, and the guide member 72 as an alignment member. The alignment member, the air inlet and the ink outlet are disposed along the vertical axis as shown in Fig.3.

The invention according to claim 1 requires that the air interface, the alignment pocket and the printing-fluid interface are disposed in this order, but doesn't require that they are proximally-positioned. So, the argument of the application that the present invention can limit the effects of the tolerance of the alignment pocket can't be accepted.

It is a well-known art that an ink cartridge is aligned with a slot at three points of above, below and center. It is also common art that any one of these three points is an ink outlet (ex. see JP2002-113861A (common document 1)).

The invention described in cited document 1 has also an electric interface in the same plane.

It is also common art that the ink cartridge is fixed by engaging a concave portion with a protrusion (see common document 1).

Thus, the invention according to claim 1 can easily achieved by a person skilled in the art by applying a well-known alignment means to the invention described in cited document 1.

The positioning relationship between the alignment pocket and the air interface, the printing-fluid interface, the electric interface can be changed by a person skilled in the art based on a shape of

the ink cartridge and a size and a layout of each interface. The behaviors and the effects, which the applicant insists, can also be predicted by a person skilled in the art and are not exceptional.

Granted that the interface and the alignment pocket are proximally-positioned, it is self-evident that the effects of the tolerance can be limited by doing this (ex. see JPH1-58765A (common document 2)).

The invention according to claim 3 cannot also overcome the above reason for refusal.

The inventions according to claims 2 and 4 to 6 has the same reason for the refusal as claims 1 and 3.

If the applicant is dissatisfied with this decision, and if the date of the transmission of the examiner's decision is before 4/1st/2009, an appeal may be lodged to the Commissioner of the Patent Office within 30 days (90 days for residents abroad) from the transmittal of the certified copy of the decision, if the date of the transmission of the examiner's decision is after 4/1st/2009, an appeal may be lodged to the Commissioner of the Patent Office within 3 months (4months for residents abroad) from the transmission of the certified copy of the decision (Section 121(1) of the Patent Law from prior to/after revision to the Law 16th dated 4/18th/2008).
(Teaching based on Section 46(2) of the Administrative Case Litigation Law)

With regard to this decision, an action for cancellation against a trial decision may be instituted only with respect to the trial decision on the demand for the appeal trial against this decision (Section 178(3) of the Patent Law).

I certify that matters described above are identical with those recorded on the file.

Date of certification 4/10/2008

Administrative Official of Ministry of Economy, Trade and Industry

Makoto YOSHIKOSHI

INK CONTAINER REFURBISHMENT SYSTEM

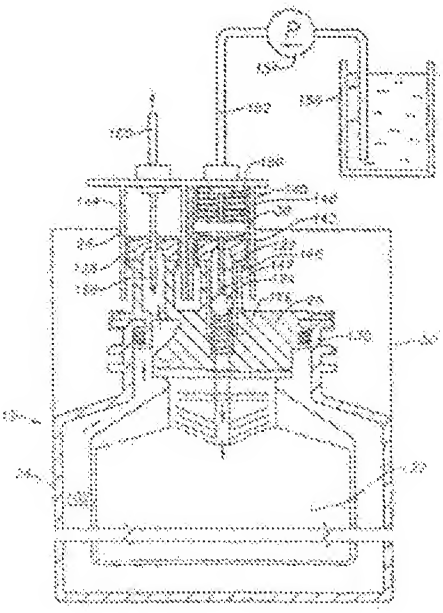
** Publication number: JP2002509303 (T)
Publication date: 2002-03-26
Inventor(s):
Applicant(s):
Classification:
- international: B41J2/175; B41J2/17S; (IPC1-7): B41J2/175
- European: B41J2/175C7M; B41J2/175C1; B41J2/175C2; B41J2/175C7E
Application number: JP20000534408T 19980511
Priority number(s): US19980034719 19980304; US19980053550 19980401; WO1998US08866 19980511

Also published as:
WO9944830 (A1)
HK1028775 (A1)
ES2179493 (T3)
ES2263733 (T3)
EP1060081 (A1)

more >>

Abstract not available for JP 2002509303 (T)
Abstract of corresponding document: WO 9944830 (A1)

Alternative methods for refurbishing a single-use ink delivery container (12) for a printing system are described. The refurbishing methods include electrical and mechanical reconfiguration or replacement of original elements on the ink delivery container. Each method utilises an existing ink fluid outlet (30), electrical connector (54) and an information storage device on the ink delivery container.



**ALREADY CITED

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JP2002-505212A (Cited Document 1)

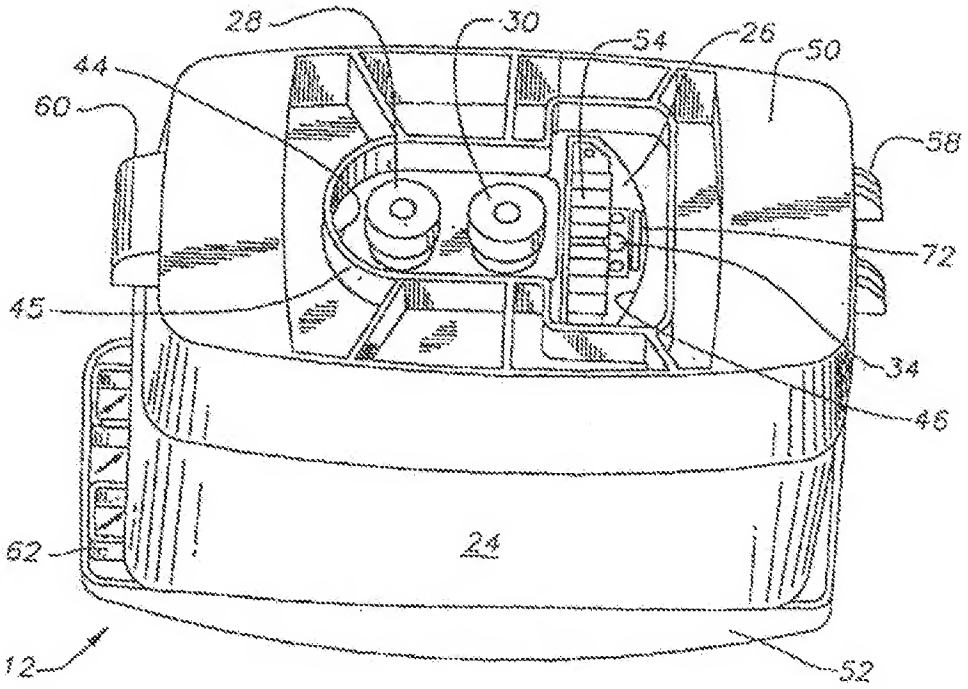

Fig. 3

12 INK CONTAINER
26 CHASSIS
28 AIR INLET
30 FLUID OUTLET
50 LEADING CAP
52 TRAILING CAP
54 CONTACTING PAD
58, 60 KEYING AND GUIDING FEATURES

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-058765
(43)Date of publication of application : 02.03.1999

(51)Int.Cl. B41J 2/175

(21)Application number : 09-230379
(22)Date of filing : 11.08.1997

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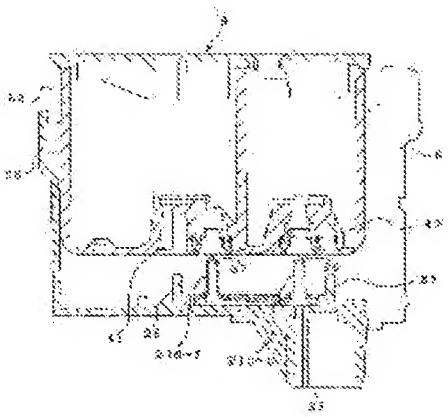
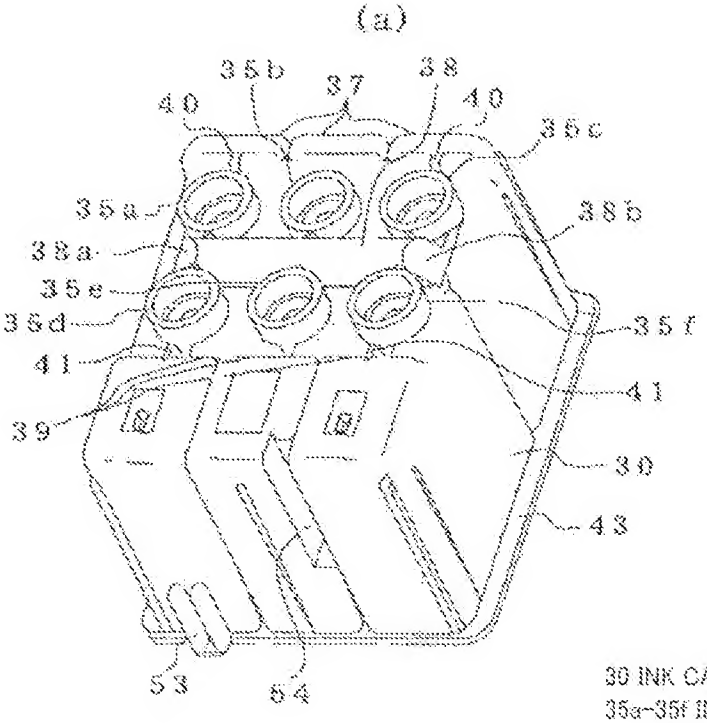
(54) INK-JET TYPE RECORDING APPARATUS, AND INK CARTRIDGE USED THEREFOR

(57)Abstract:
PROBLEM TO BE SOLVED: To accurately position and mount an ink cartridge having a large number of ink supply openings at ink supply needles.
SOLUTION: The recording apparatus has a configuration wherein a recording head receiving an ink supply at the outside via ink supply needles and an ink cartridge 9 comprising ink supply openings engaged with ink supply needles 21a to 23f are mounted on a carriage detachably for printing by reciprocally moving the carriage in the width direction of the recording medium. Contact parts 24, 25 for contacting with ribs 40, 41 formed integrally with the main body for protecting the ink supply openings at the bottom surface of the ink cartridge are provided in the vicinity of the ink supply needles 21a to 21f so that the ink supply openings are accurately positioned at the center of the ink supply needles 21a to 21f owing to the ribs 40, 41 and the contact parts 24, 25.





30 INK CARTRIDGE
35a–35f INK DELIVERY APERTURE
40, 41 RIB

FIG. 5

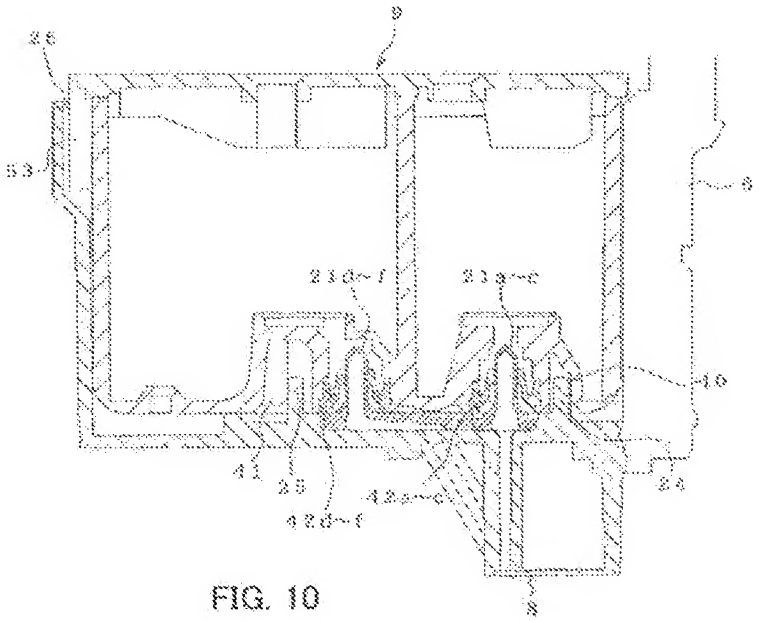


FIG. 10

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-113881
(43)Date of publication of application : 16.04.2002

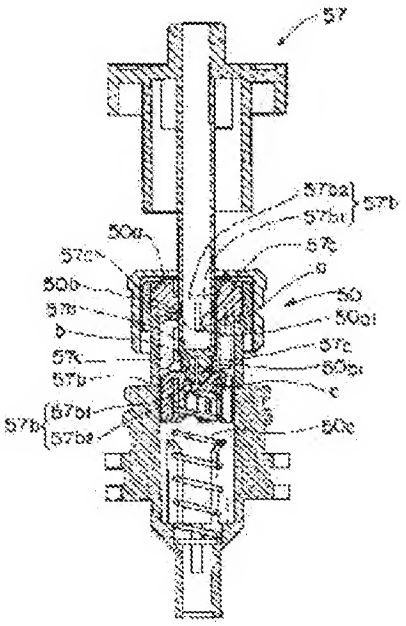
(51)Int.Cl. B41J 2/175

(21)Application number : 2000-311746
(22)Date of filing : 12.10.2000

(71)Applicant : SEIKO EPSON CORP
(72)Inventor : ISHIZAWA TAKU
KOBAYASHI ATSUSHI

(54) CONNECTION STRUCTURE OF INK CARTRIDGE AND INK JET RECORDER COMPRISING IT

(57)Abstract:
PROBLEM TO BE SOLVED: To prevent generation of print trouble by blocking intrusion of air in an ink lead-out opening into a tube at the time of connecting an ink cartridge.
SOLUTION: An ink lead-out opening 50a1 is opened by pressure inserting an ink introduction tube 57 into the plug body 50 of a main tank 9 and pressing a movable body 50b, while furthermore, the plug body 50 and the ink introduction tube 57 are interconnected and the main tank 9 is connected with a cartridge holder 8. In such a connection structure of ink cartridge, a protrusion 57b for pressing the movable body 50b is provided on the pressure inserting side of the ink introduction tube 57 and that protrusion 57b is provided with an air exhaust passage 57c communicating with the inside and outside of the ink lead-out opening 50a1 under a state where air is exhausted by pressure inserting the ink introduction tube 57 into the plug body 50.



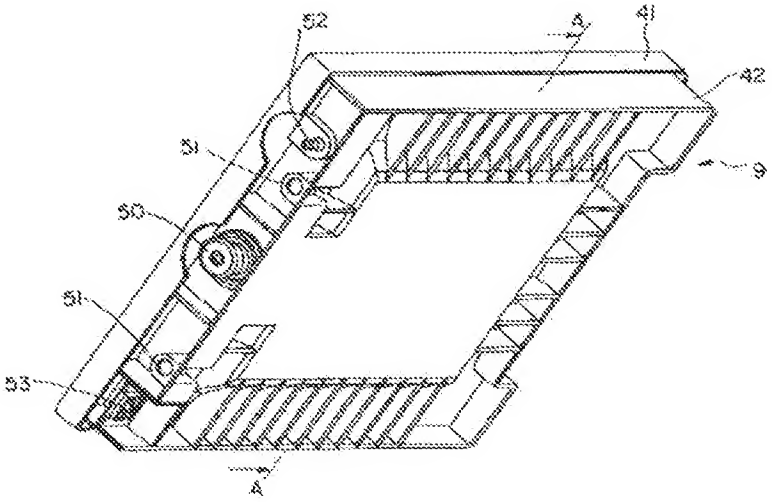


FIG. 3

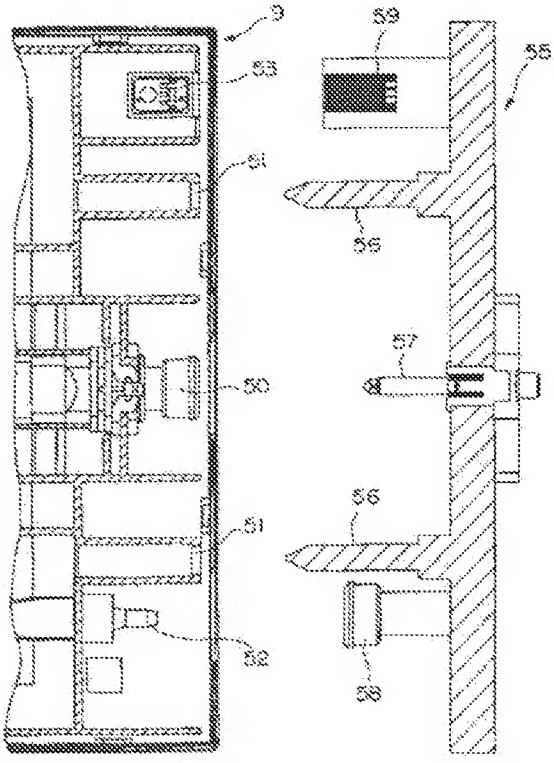


FIG. 6

9 INK CARTRIDGE
50 INK OUTRET TUBE
51 OPENING APERTURE
52 AIR INLET
53 CIRCUIT BOARD
55 CONNECTING MECHANISM
56 ALIGNMENT PIN
57 INK SUPPLYING TUBE
58 AIR SUPPLYING TUBE